**MID TERM EXAM**

**FORM 1**

**NAME…………………………………………………………..ADM………………………….**

MATHS FORM 1 2017

SECTION 1 (40MKS)

DO ALL QUESTIONS IN THIS SECTION;

1. Without using mathematical tables, evaluate:

 1.2 x 0.0324

 0.0072 (4mks)

̇

 2.Evaluate: 2 x (-3) + 35 $÷$5

 -9 + 14 $÷$ 7 + 4 (3mks)

 3.Simplify by factorization.

 18xy - 18xt

 9xt – 9xy (3mks)

1. Express as a fraction: 2$∙$3$ ̇$ (3mks)
2. Given that x = -2, y= 3 find the value of :

 X2 – xy

 Y –x (4mks)

1. Simplify: 2 (4m + 3n) – 3(2m + 3n) (3mks)
2. Solve the equation:

X – 2x – 1 – x + 2 =1

 3 5 (4mks)

1. Four bells ring at the intervals of 40 seconds, 45seconds, 60 seconds and 75 seconds respectively. They start together. After how many minutes will they next ring together? (4mks)
2. Place the numbers in a place value chart:
3. 380732001 (2mks)
4. 5637.4968 (2mks)

 10. Workout: 5 - 1 of 27 $÷$ 2

1. 3 20 (3mks)

11. Express 10500 in terms of its prime factors. (2mks)

12. A square room is covered by a number of whole rectangular slabs of sides 60cm by 42cm. Calculate the least possible area of the room. (4mks)

13. Write in standard form:

(a) 0.000472 (1mk)

(b) 5430000 (1mk)

SECTION II (40MKS)

 ANSWER FOYR QUESTIONS ONLY:

1. (a) By use of factor method, evaluate the following:

(i) 18225 (2mks)

 (ii) 0.576 (3mks)

 (b) By use of the mathematical table evaluate:

 (i) 14400 (2mks)

 (ii) 0.0025612 (2mks)

1. Reciprocal of 0.03521 (1mk)
2. (a) Fill in the table with the correct approximation. (6mks)

|  |  |  |  |
| --- | --- | --- | --- |
| Number |  2 s.f |  1 d.p |  Nearest whole number |
| 3.7998 |  |  |  |
| 999.999 |  |  |  |

1. Find the value of the following:

(i) 1.8 $÷$ 6 (1mk)

(ii) 300 $÷$ 0.5 (1mk)

(iii) 0.17 x 3 (1mk)

(iv) (0.004)2 (1mk)

1. (a) remove brackets and simplify:

 (i) 2(4x + 2y) - 3(2x +y) (2mks)

(ii) 3b + (a + 2b) – (a – b) (2mks)

1. Simplify:

(i) 48 x2y

 12xy (2mks)

(ii) 1 of 35y (2mks)

 7

(iii) 3b x 11ab (2mks)

1. (a) use the number to work out the following:

 (i) 4 + 7 (1mk)

 (ii) 5 - 8 (1mk)

 (iii) (-6) + (+7) (1mk)

(b) Simplify the following without the use of the number line:

(i) 12 – 6 4 (1mk)

(ii) -7 – b4 – 1 (1mk)

(iii) -3 + 14 + (-5) (1mk)

1. (+7) x (-8) (1mk)
2. (-9) x (-12) (1mk)
3. (-6) x (-5)

 (-10) (2mks)

1. (a) Arrange the following:

(i) 3, 5, 7, 13 in ascending

 5 8 10 20 order (2mks)

(ii) 1 , 4 , 9 , 11 in descending order. (2mks)

 2 5 10 15

(b) Express the fraction :

 (i) 42

 70 (1mk)

(ii) 252

 1728 (1mk)

(c) Evaluate:

(i) 4 3/8 - 3 11/1`2 (2mks)

(ii) 2 2/3 x 11/2

 44/5 (2mks)